

**Environmental Assessment  
for the Proposed Hancock 115 kV Substation and  
Transmission Line Tap  
Stevens County, Minnesota**

**Stevens County**

***July 2005***

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## **1.0 Summary**

Great River Energy (GRE), located in Elk River, MN, provides generation and transmission to 28 member cooperatives in Minnesota. One of these cooperatives, Agralite Electric Cooperative (Agralite), is planning to construct and own a new 115 kV substation near the City of Hancock, Stevens County, Minnesota (Figure 1).

GRE proposes to construct, own, and operate approximately 125 feet of 115 kV transmission line to energize the new substation (Figure 2). The line will be a single circuit design and will tap an existing 115 kV transmission line just south of the substation that is owned by and operated by GRE. GRE will also own transmission switching facilities located in the substation.

## **Proposed Facilities**

### **2.1 Project Need**

Agralite's existing 41.6 kV Hancock Substation is inadequate from a reliability and voltage standpoint. This substation has seasonal voltage swings that are nearly outside the capability of the substation's voltage regulators. A local consumer will soon have a need for an additional 1.2 megawatts of power to operate an expanding operation. This new demand will exceed the capacity of the existing substation. Agralite is proposing to construct and own a new 115 kV substation next to Great River Energy's 115 kV transmission line, which will provide a new source that will greatly benefit the entire area's electric reliability and service.

### **2.2 Proposed Location**

The new substation will be located in Section 12, T123N, R40W at the northeast corner of Minnesota Highway 9 and 300<sup>th</sup> Street just south of Hancock in Moore Township, Stevens County, Minnesota (see Figure 2). The new location is one mile east of the existing Hancock Substation.

The new substation will be built next to GRE's existing 115 kV transmission line and will contain a 115 kV transformer to lower the voltage to a distribution level. The existing substation will be retired upon the completion of the new substation.

Great River Energy will own and construct the 115 kV transmission line tap. The tap will consist of a two-way switch pole placed in line with the existing transmission line. The switch pole will be 70-80 feet high with a single span of 125 feet into the substation (Figure 2).

Figure 1  
Vicinity Area Map

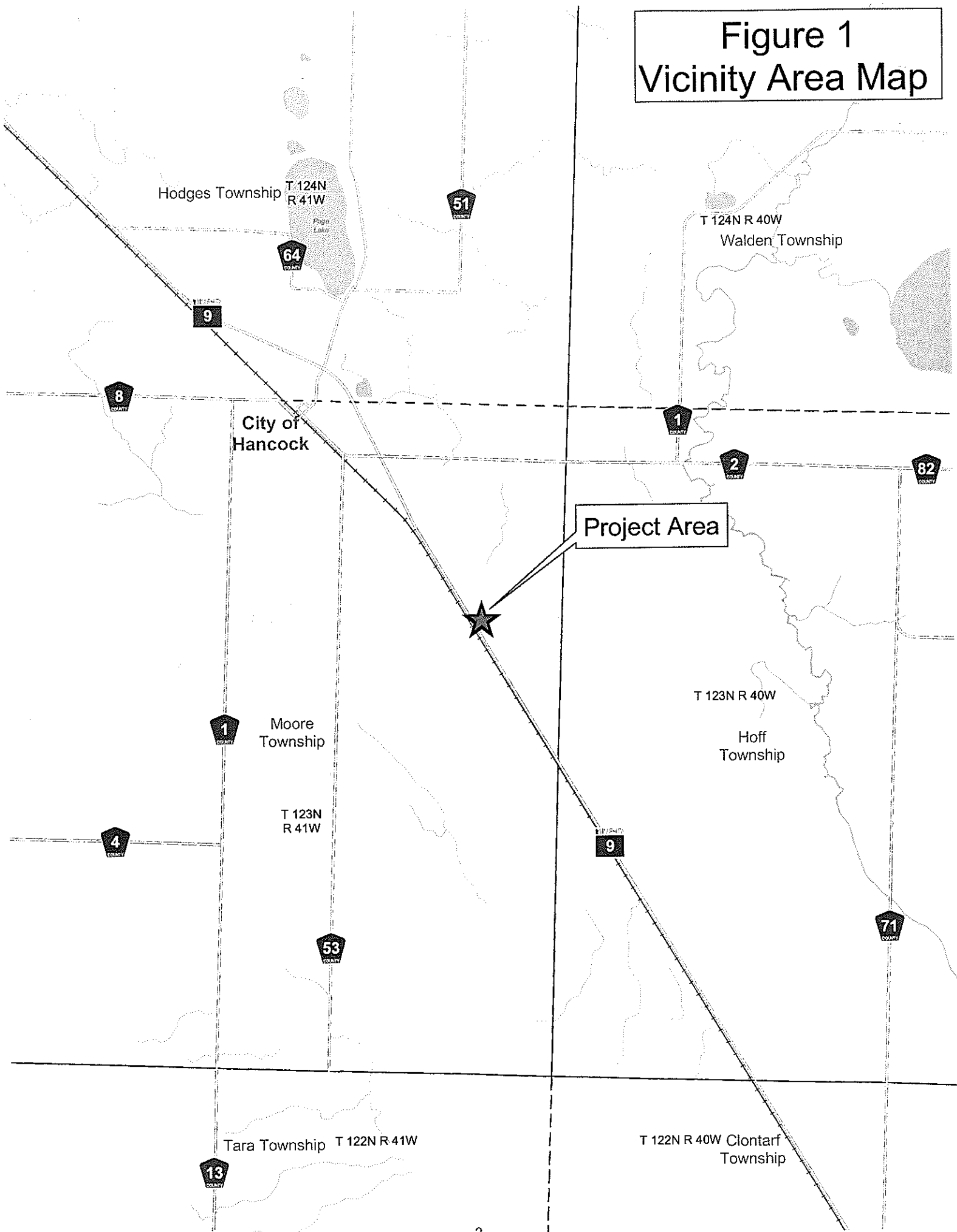
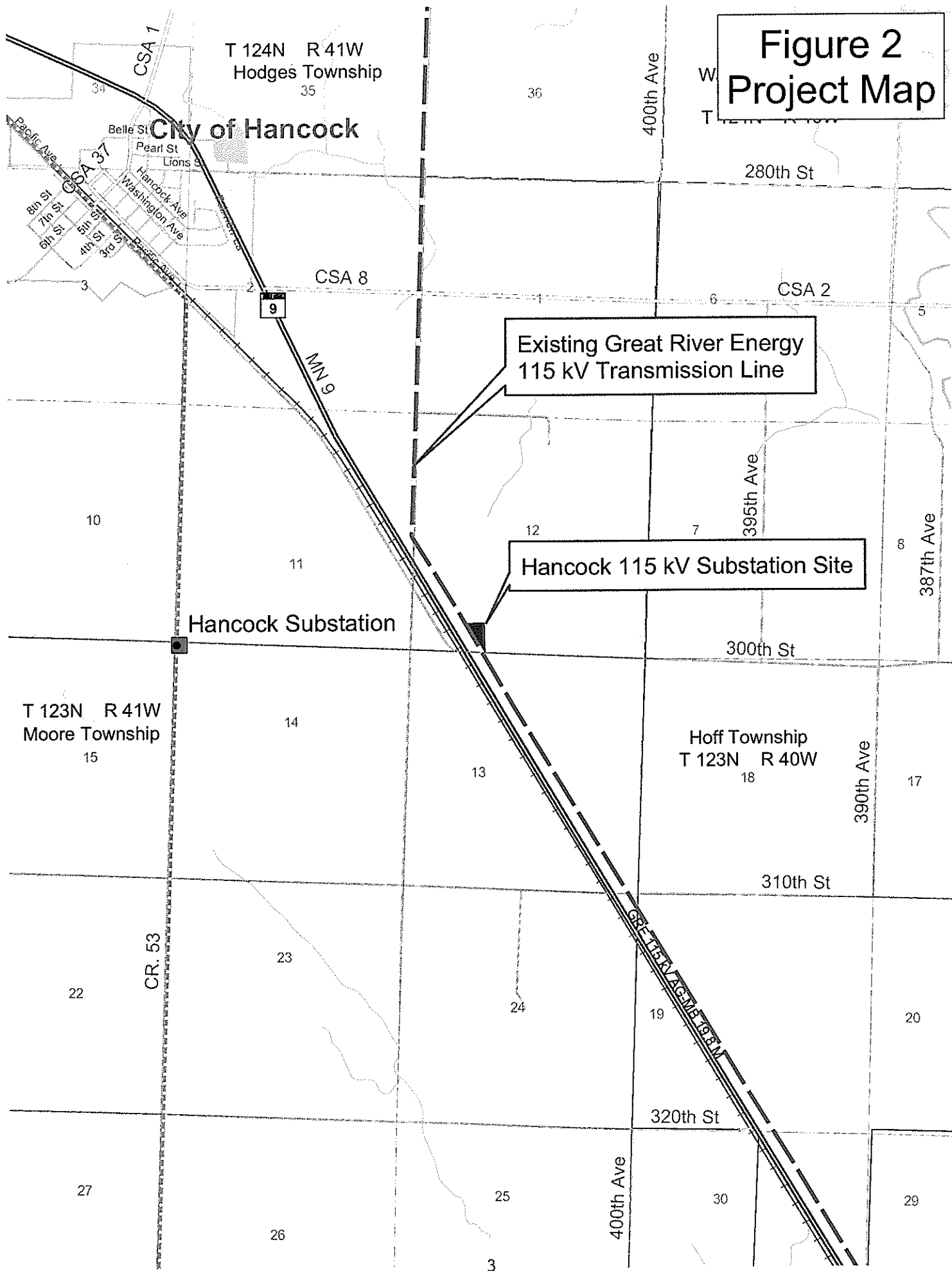


Figure 2  
Project Map



### 2.3 Ownership

The substation site will be owned by Agralite and all distribution facilities will be constructed, operated and maintained by Agralite. The transmission line tap will be constructed, owned and operated by GRE. GRE will also own switching facilities in the substation.

### 2.4 Substation Design

The substation will be enclosed in a fenced area situated inside the approximately 3½ acre parcel. A 7-foot high chain link fence (with an additional one foot of barbed wire around the top) will be installed. The fence will be designed to deter animals. A typical distribution substation is shown on the fact sheet in Appendix A.

Electric facilities in the substation will include a 7.5 MVA transformer and four feeders (Figure 3).

### 2.5 Transmission Facilities

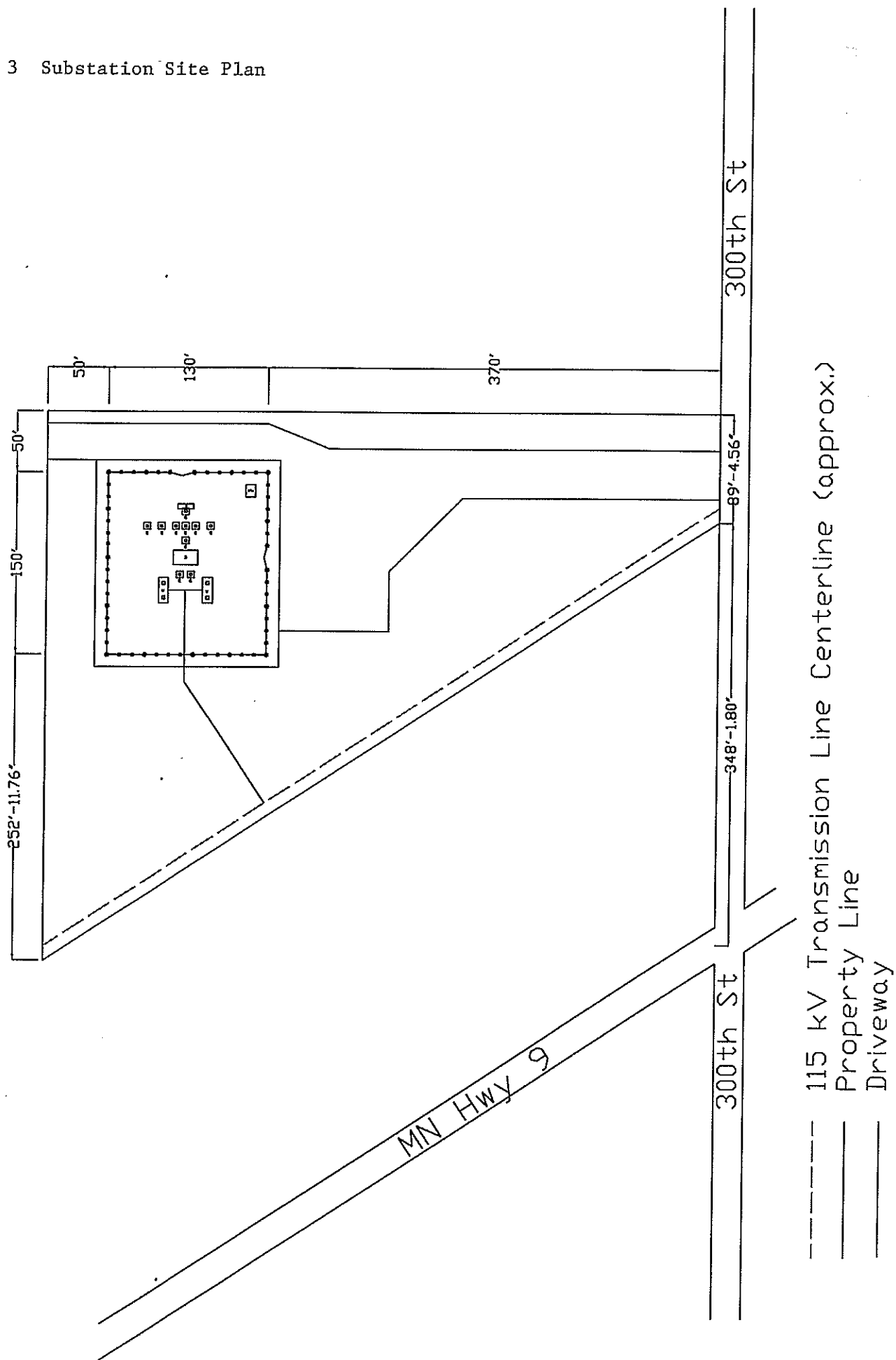
The transmission line tap will be a single circuit design off of GRE's existing 115 kV transmission line. A typical structure is shown on the fact sheet in Appendix A.

A single span (125 feet) of wires will run from the two-way switch pole into the substation (Figure 3). The switch pole will be 70-80 feet tall.

### 2.6 Cost Estimate

The estimated cost for the distribution substation facilities is \$ 750,000 including all site preparation and equipment. The estimated cost for the transmission facilities is \$125,000. Total project cost is estimated to be \$ 875,000.

Figure 3 Substation Site Plan



### **3.0 Environmental Analysis**

#### **3.1 Natural Environment**

The effects of the project on the natural environment, including air, water, vegetation and wildlife have been considered. Responses received from state and federal agencies that reviewed the project are provided in Appendix A.

##### **Air Quality**

Because electric substations and transmission lines do not affect air quality, there will be no long-term environmental impacts on the air. Temporary air quality impacts would be expected to occur during the construction phase of the project. However, adverse impacts to the surrounding environment will be minimal because of the short and intermittent nature of the emission and dust-producing construction phase.

##### **Water Resources**

No impacts to water resources are anticipated. The substation does not displace any existing wetlands or have any impact on groundwater or other surface waters. The US Army Corps of Engineers (Corps) was contacted regarding this project and in a response dated July 13, 2005, the Corps outlined the types of projects that are subject to the Corps of Engineers' jurisdiction. This project does not fit into any of these jurisdictional categories.

There are no Minnesota Department of Natural Resources (DNR) Public Waters in the vicinity of the project, and the DNR had no concerns with the project (e-mail dated July 12, 2005).

##### **Vegetation and Wildlife**

The DNR and the United States Department of the Interior Fish and Wildlife Service (FWS) were contacted regarding vegetation and wildlife resources in the vicinity of the project. There are no Centers of Highly Sensitive Areas in the project vicinity, and the DNR (e-mail of July 12, 2005) had no concerns with the project. The FWS (e-mail of July 13, 2005) indicated that there are no federally listed federal or threatened species in the action area.

Effects on area wildlife will be minimal. The substation is designed to deter animal entry.



### 3.2 Human Settlement

The proposed substation project is located in an area zoned agricultural. Impacts on human settlement will be very minimal, as the substation and transmission line will not cause the displacement of any residence or recreational area and will not affect any public services.

### 3.3 Noise

The proposed substation will be designed and constructed to comply with State of Minnesota noise standards. It has been determined that there will be negligible noise at the property boundaries. The substation transformer will be designed in accordance with ANSI standards.

### 3.4 Aesthetics

The substation and transmission line as designed will have some impact on aesthetics of the area, as they will be within the viewshed of some residences. Trees will be planted on the north side of the substation to provide screening.

### 3.5 Soils and Geology

The proposed site will require some grading. Minimal erosion may occur at the site during construction, but these short-term impacts can be minimized through the use of Best Management Practices.

### 3.6 Archaeological and Historic Resources

The Minnesota Historical Society State Historic Preservation Office (SHPO) was contacted about the presence of archaeological, historical or architectural resources located on or near the site. In a letter dated June 17, 2005, SHPO indicated that no historic properties eligible for or listed on the National Register of Historic Places will be affected by this project.

### 3.7 Transportation

The site will not affect any public right of ways. Access to the site will use the existing township roadways. No roadway improvements will be needed for equipment delivery. The Minnesota Department of Transportation, Division of Aeronautics indicated in an e-mail of June 6, 2005 that the closest airports are located at Benson and Morris and the proposed construction would not affect the operations at these airports and would not appear to have any affect on aircraft travel in the vicinity.

### 3.8 Public Health and Safety

No threats to public health and safety are anticipated for this project. All facilities will be constructed in accordance with the National Electric Safety Code and other industry standards. Construction personnel will be required to follow OSHA regulations. Other safety measures such as warning signs, fencing, and gates will be utilized as needed.

Questions often arise about electric and magnetic fields (EMF), which are invisible lines of force that surround any electrical device. The term EMF refers to electric and magnetic fields that are coupled together such as in high frequency radiating fields. For lower frequencies such as for power lines, EMF should be separated into electric fields and magnetic fields. Transmission lines operate at a frequency of 60 hertz (cycles per second), which is in the non-ionizing portion of the electromagnetic frequency spectrum. Fields are considered ionizing when they cause electrons to eject from their orbits around a normal atom. This will typically occur with frequencies in the range of  $10^{16}$  to  $10^{22}$  hertz.

Magnetic fields result from the flow of electricity (current) in the transmission line. The intensity of the magnetic field is related to the current flow through the conductors. The magnetic field associated with the transmission line surrounds the conductor and rapidly decreases with the distance from the conductor. The value of the magnetic field density is expressed in the unit of gauss (G) or milligauss (mG).

Electric and magnetic fields (EMF) have not been calculated for this project. The most recent and exhaustive studies of the health effects from power frequency fields conclude that the evidence of health risk is weak. Some of these studies are listed below:

- National Institute of Environmental Health Sciences. 2002. *EMF. Electric and Magnetic Fields Associated with the Use of Electric Power*. National Institutes of Health.
- National Research Council. 1997. *Possible Health Effects of Exposure to Residential Electric and Magnetic Fields*.
- Minnesota Department of Health. 2002. *EMF White Paper on Electric and Magnetic Field (EMF) Policy and Mitigation Options*.
- Electric and Magnetic Fields (EMF): Environmental Health in Minnesota. <http://www.health.state.mn.us/divs/eh/radiation/emf>

## **4.0 Permits, Approvals and Public Comments**

### **4.1 Overview of the Minnesota Approval Process**

This project falls under the State of Minnesota's Power Plant Siting Act, (Minnesota Statutes § 116C.51-.69 and Minnesota Rules Chapter 4400) for transmission projects over 100 kV and requires a permit from the Minnesota Public Utilities Commission (Commission). However, for eligible projects, a utility may apply to the local unit of government that has jurisdiction over the project for approval instead of applying to the Commission (Minn. Rules pt. 4400.5000). This proposed 115 kV substation project is eligible for local review.

Stevens County has agreed to act as the lead local unit of government with jurisdiction to approve the project. Stevens County was afforded the opportunity to relinquish its jurisdiction by requesting that the Commission assume jurisdiction, but has elected to maintain jurisdiction of the project. As required by Minn. Rules pt. 4400.5000 Subp.3, a project notice was sent to those persons on the Power Plant Siting General Notification list (see Appendix B).

In accordance with Minn. Rules pt. 4400.5000 Subp.5, an environmental assessment (EA) prepared by the local unit of government with jurisdiction over the project must be completed. Specific requirements include an opportunity for public participation in developing the scope of the EA before it is prepared, published notice in the Environmental Quality Board (EQB) Monitor when the EA is available for review, and the procedure for commenting on the EA. Final decision on the project will not be made until at least ten days after the notice appears in the EQB Monitor.

### **4.2 EA Public Involvement**

Stevens County sent out a Public Comment Notice on July 13, 2005 to landowners in the vicinity to obtain input from the public on the scope of the EA for the project (see Appendix B). No comments were received from the public regarding the scope of the EA.

### **4.3 Local Permitting**

Stevens County requires a Conditional Use Permit for this project. An application for a Conditional Use Permit was delivered to Stevens County on May 18, 2005. Stevens County will hold a public hearing on August 15, 2005 regarding Agralite and GRE's request for a Conditional Use Permit. The County will vote on the application after notice of the EA has been published in the EQB Monitor and the comment period requirements have been met.

#### 4.4 Other Permits and Approvals

Government Unit	Type of Approval	Regulated Activity	Status
USDA Rural Utilities Service (RUS)	Environmental Review	Construction of 115 kV transmission line tap and 115 kV substation	Approval in process
USDA Natural Resources Conservation Service	Environmental Review	Wetland conservation and impact on unique, prime or statewide important farmland	No response was received from the NRCS.
US Dept. of Interior Fish and Wildlife Service	Threatened and Endangered Species Review	Review of records for federally threatened or endangered species that may exist at or near the substation site or transmission facilities	No federally listed federal or threatened species in the action area – e-mail dated July 13 , 2005
US Dept. of the Army Corps of Engineers	Wetland and Waterways Review	Review navigable water and the dredging or filling of US waters including wetlands	Proposed project not in jurisdictional category – letter of July 13 , 2005
MN Dept. of Natural Resources (DNR)	Environmental Review – Wetlands, Water, Threatened and Endangered Species	Comprehensive review of substation site impacts	The DNR has no concerns with the project– e-mail dated July 12, 2005
Minnesota Department of Transportation – Aeronautics Division	Airspace Concerns	Public and private airports/airstrips	The project would not affect the operations at the Benson or Morris airports – e-mail of 6/6/05
MN Historical Society State Historic Preservation Office (SHPO)	SHPO Review of Nationally Registered Historic Places	Historic preservation	No historic properties will be affected by the project – letter of June 17, 2005.
Stevens County	Conditional Use Permit	Construction of new facilities	Application submitted 5/18/05.

## **APPENDIX A**

### **AGENCY CORRESPONDENCE**



DEPARTMENT OF THE ARMY  
ST. PAUL DISTRICT, CORPS OF ENGINEERS  
ARMY CORPS OF ENGINEERS CENTRE  
180 FIFTH STREET EAST  
ST. PAUL MN 55101-1638

July 13, 2005

REPLY TO  
ATTENTION

Operations  
Regulatory (2005-4109-TJH)

Ms. Carole L. Schmidt  
Great River Energy  
17845 East Hwy 10, P.O. Box 800  
Elk River, MN 55330-0800

Dear Ms. Schmidt:

We have received the document entitled "Hancock 115 kV Substation and Transmission Line Tap" dated 18 May, 2005. Due to limited staff and resources, it is unlikely that U.S. Army Corps of Engineers Regulatory staff will review or comment on this document until we receive a jurisdictional determination request and/or a permit application. In lieu of a specific response, please consider the following general information concerning our regulatory program that may apply to the proposed project.

If the proposal involves activity in navigable waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit.

If the proposal involves deposition of dredged or fill material into waters of the United States, including discharges associated with mechanical land clearing, it may be subject to the Corps of Engineers' jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404. Information about the Corps permitting process can be obtained online at <http://www.mvp.usace.army.mil/regulatory>.

The Corps' evaluation of a Section 10 and/or a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325); (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying for a Section 404 permit cannot be factored into the Corps' decision whether there is a less damaging practicable alternative to the proposal.

If an application for a Corps permit has not yet been submitted, the project proposer may request a pre-application consultation meeting with the Corps to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process. A pre-application consultation meeting is strongly recommended if the proposal has substantial impacts to waters of the United States, or if it is a large or controversial project.

For further information or to request a pre-application consultation meeting, please contact Tom Hingsberger at 651-290-5367, the Corps' project manager for the County in which this proposal is located.

Sincerely,



*for* Robert J. Whiting  
Chief, Regulatory Branch

Sarah Hoffmann - Hancock Substation

Page 1

From: Sarah Hoffmann  
To: bnix@GREnergy.com  
Date: 7/12/2005 2:41:08 PM  
Subject: Hancock Substation

Post-it* Fax Note	7671	Date	7/12/05	# of pages	2/1
To	Carole Schmidt	From	Sarah Hoffmann		
Co./Dept	GRE	Co.	DNR		
Phone #		Phone #	651-296-7863		
Fax #	763-241-6072	Fax #			

Hi Carole,

Sorry this one fell through the cracks. I know I looked at it a long time ago, but I think I thought Matt was going to respond to you and he thought I was going to. In either event, we do not have any concerns with the project.

Sarah D. Hoffmann  
Endangered Species Environmental Review Coordinator  
NHIS Data Distribution Coordinator  
Minnesota Department of Natural Resources  
Natural Heritage & Nongame Research Program

500 Lafayette Rd., Box 25  
St. Paul, MN 55155  
Phone: 651/296-7863  
Fax: 651/296-1811  
Email: sarah.hoffmann@dnr.state.mn.us



**Schmidt, Carole GRE/ER**

---

**From:** Laurie\_Fairchild@fws.gov  
**Sent:** Wednesday, July 13, 2005 11:24 AM  
**To:** Schmidt, Carole GRE/ER  
**Subject:** Re: Hancock clarification

Hi Carole, as follow up to my second email, I should add that there are no federally listed federal or threatened species in your action area but there are several Waterfowl Production Areas within 1/2mile to a mile of the section you asked to have reviewed. The WPA's are in Secions 1 and 13 of T119 R40 and Sections 6 and 7 of T119, R39.

Laurie

"Schmidt, Carole GRE/ER"  
<cschmidt@GREnergy.com>

To <Laurie\_Fairchild@fws.gov>

cc

Subject: Hancock

07/12/2005 02:51 PM

Hi Laurie - see attached letter and fact sheet sent out in May. Thanks - Carole

<<HanFWS.doc>> <<Hancock115kVSubstationAndTapFactsheet1.pdf>> [attachment "HanFWS.doc" deleted by Laurie Fairchild/R3/FWS/DOI] [attachment "Hancock115kVSubstationAndTapFactsheet1.pdf" deleted by Laurie Fairchild/R3/FWS/DOI]



RECEIVED JUN 20 2005

MINNESOTA HISTORICAL SOCIETY  
STATE HISTORIC PRESERVATION OFFICE

June 17, 2005

Ms. Carole Schmidt  
Great River Energy  
PO Box 800  
Elk River, MN 55330-0800

RE: Proposed Hancock Substation and Transmission Line Tap  
T123 R41 S12, Stevens County  
SHPO Number: 2005-2126

Dear Ms. Schmidt:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and the Procedures of the Advisory Council on Historic Preservation (36CFR800).

Based on available information, we conclude that **no properties** eligible for or listed on the National Register of Historic Places are within the project's area of effect.

Please contact Dennis Gimmestad at (651) 296-5462 if you have any questions regarding our review of this project.

Sincerely,

Britta L. Bloomberg  
Deputy State Historic Preservation Officer

## Schmidt, Carole GRE/ER

---

**From:** Jim Groehler [Jim.Groehler@dot.state.mn.us]  
**Sent:** Monday, June 06, 2005 1:13 PM  
**To:** Schmidt, Carole GRE/ER  
**Subject:** Proposed Hancock 115 kV Substation and 115 kV TransmissionLine Tap

We have reviewed the proposed substation and transmission tap line in relation to public airports located in the vicinity. The closest airports are located at Benson and Morris. The proposed construction would not affect the operations at these airports and would not appear to have any affect on aircraft travel in the vicinity.



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18 May 2005

Mr. Tom Hingsberger  
Department of the Army  
Corps of Engineers  
St. Paul District, Attn: CO-R  
190 Fifth Street East  
St. Paul, MN 55101-1638

RE: Proposed Hancock 115 kV Substation and 115 kV Transmission Line Tap  
Stevens County, Minnesota

Dear Mr. Hingsberger:

Great River Energy (GRE) is in the process of preparing an environmental assessment for a new 115 kV substation and a 115 kV transmission tap line into the substation in Stevens County, Minnesota. The substation, which will be constructed and owned by Agralite Electric Cooperative (Agralite), is needed to meet growing electrical needs and improve system reliability in the area. GRE will construct and own approximately 125 feet of single circuit 115 kV transmission line to energize the proposed substation.

The proposed substation and tap line are located in Section 12, T123N, R40W near Hancock, Minnesota. A project fact sheet and a site map are enclosed for your information.

GRE is requesting information on the possible effects of the proposed project on floodplains, wetlands, and other important natural resources that occur in the project area.

We would appreciate receiving any written comments from your office by Friday, June 17, 2005. If you have any questions about this proposed project, please contact me at (763) 241-2272. If you wish to respond by e-mail, my address is [cschmidt@greenergy.com](mailto:cschmidt@greenergy.com). Thank you for your cooperation and assistance.

Sincerely,

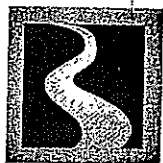
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*Carole L. Schmidt*

Carole L. Schmidt  
Environmental Scientist

Enclosure

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18 May 2005

Mr. Tom Balcom, Supervisor  
Division of Ecological Services  
Minnesota Department of Natural Resources  
500 Lafayette Road  
St. Paul, MN 55155-4025

RE: Proposed Hancock 115 kV Substation and 115 kV Transmission Line Tap  
Stevens County, Minnesota

Dear Mr. Balcom:

Great River Energy (GRE) is in the process of preparing an environmental assessment for a new 115 kV substation and a 115 kV transmission tap line into the substation in Stevens County, Minnesota. The substation, which will be constructed and owned by Agralite Electric Cooperative, is needed to meet growing electrical needs and improve system reliability in the area. GRE will construct and own approximately 125 feet of single circuit 115 kV transmission line to energize the proposed substation.

The proposed substation and tap line are located in Section 12, T123N, R40W near Hancock, Minnesota. A project fact sheet and a site map are enclosed for your information.

GRE is requesting information on the possible effects of the proposed project on wetlands, threatened and endangered species, and other important state natural resources that occur in the project area.

GRE reviewed the DNR Public Water Inventory Map for Stevens County and the Minnesota Natural Heritage database and found there are no Public Waters or Sensitive Areas in the vicinity of the proposed project (see attached maps).

We would appreciate receiving any written comments from your office by Friday, June 17, 2005. If you have any questions about this proposed project, please contact me at (763) 241-2272. If you wish to respond by e-mail, my address is [cschmidt@greenergy.com](mailto:cschmidt@greenergy.com). Thank you for your cooperation and assistance.

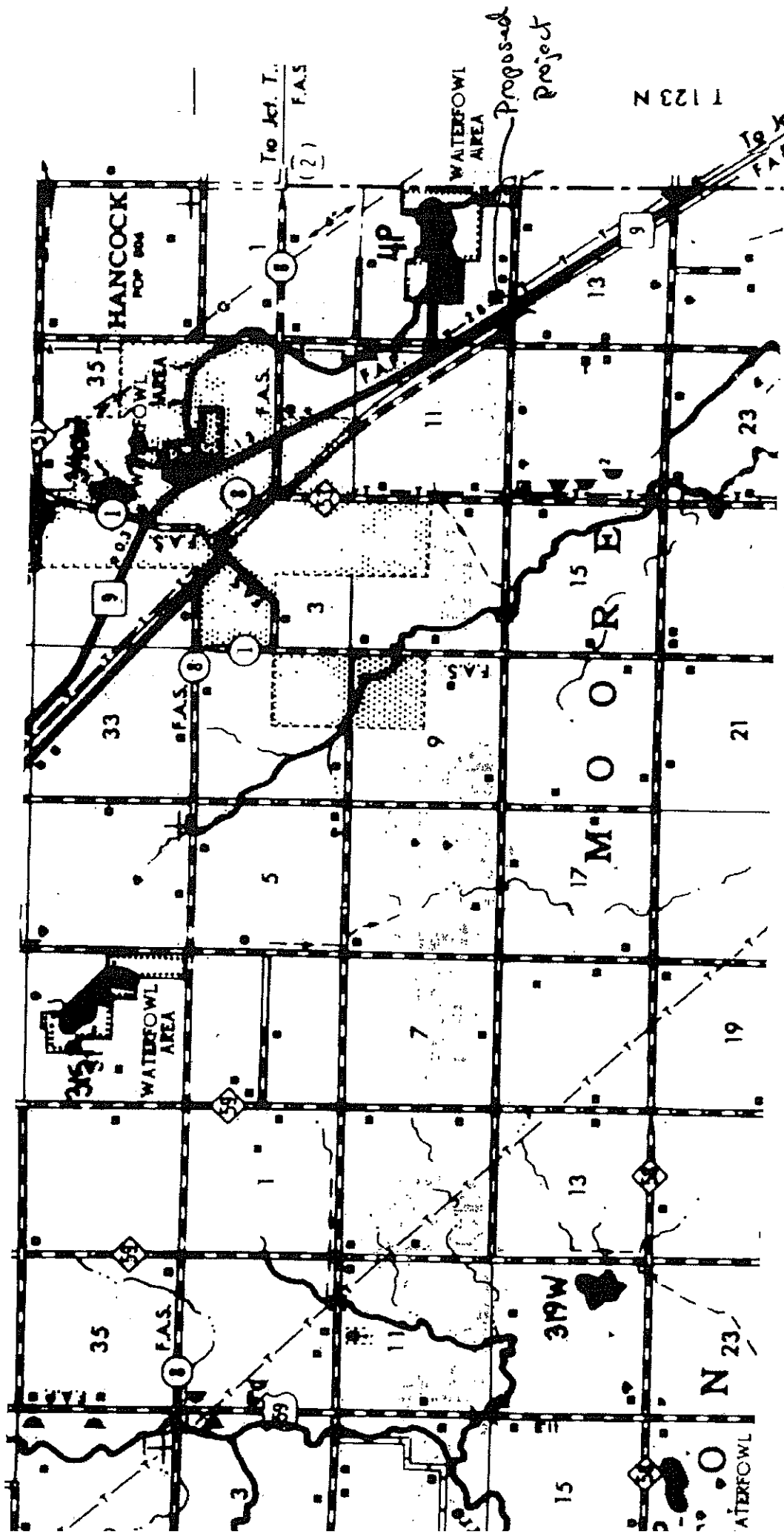
Sincerely,

GREAT RIVER ENERGY

*Carole L. Schmidt*

Carole L. Schmidt  
Environmental Scientist

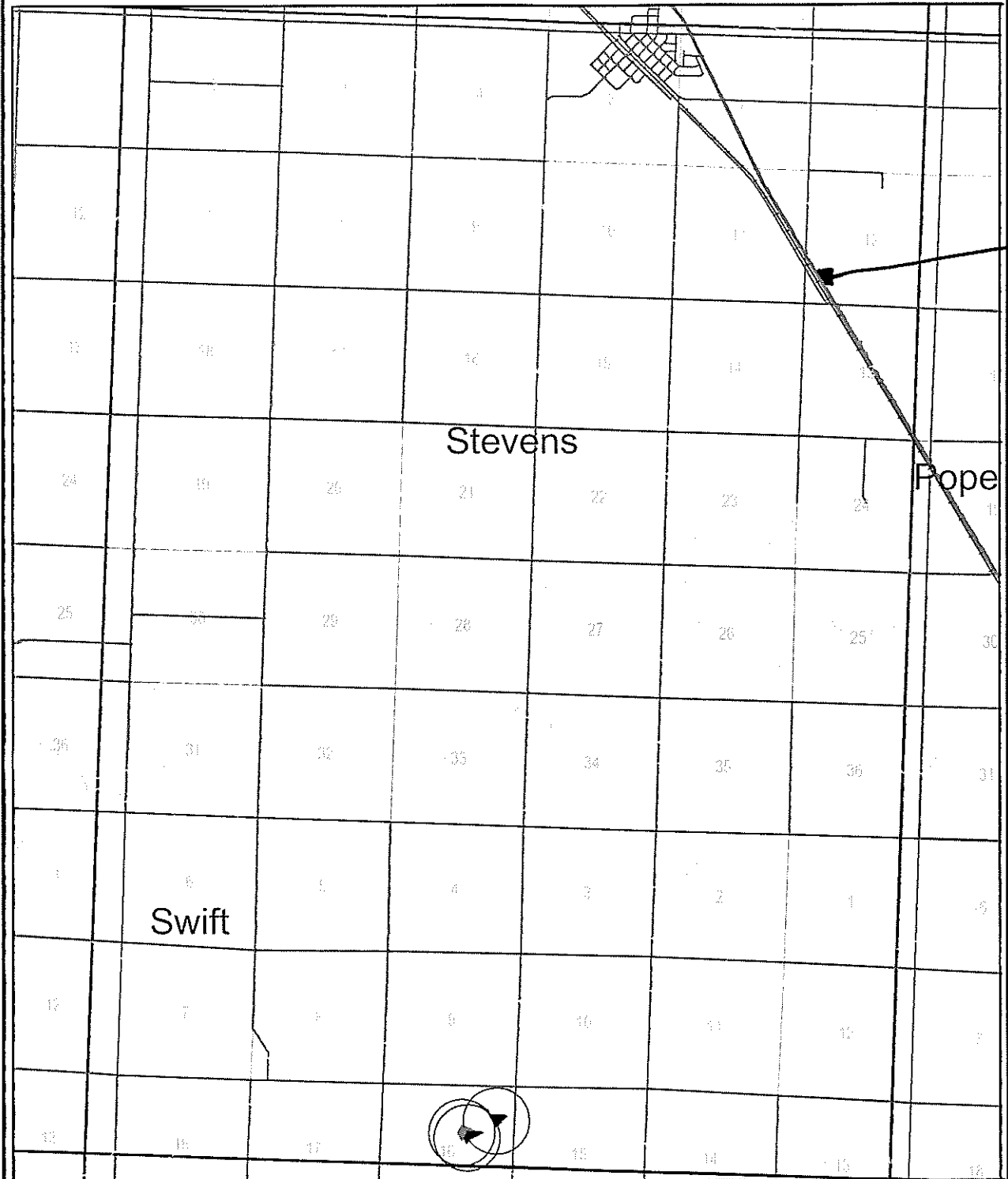
Enclosures



# Sensitive Areas

Hancock 1:24,000 U.S.G.S. Quadrangle (DNR Code = Q06a)

Includes portions of Stevens and Swift Counties

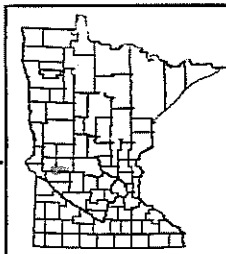
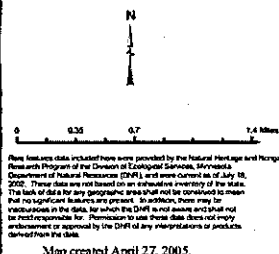


Proposed Project

Stevens

Pope

Swift



- Center of Highly Sensitive Areas
- Center of Sensitive Plant Areas
- Center of Sensitive Animal Areas
- Center of Significant Native Plant Community Areas  
non-Minnesota County Biological Survey Counties Only
- Significant Native Plant Communities  
Identified by the Minnesota County Biological Survey
- Buffer Designating Sensitive Areas
- Significant Railroad Prairie Right-of-Way Areas

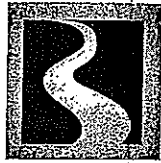
- Water bodies
- County boundaries
- Township lines
- Section lines
- Quadrangle border
- Major Roads
- Other Roads
- Railroads

United Services Group  
GIS Department  
17845 East Highway 10  
St. River, MN 55330-0341  
(763) 241-3765

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Map created April 27, 2005.

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18 May 2005

Ms. Laurie Fairchild, Habitat Conservation Biologist  
United States Department of the Interior  
Twin Cities Field Office  
4101 East 80th Street  
Bloomington, MN 55425-1665

RE: Proposed Hancock 115 kV Substation and 115 kV Transmission Line Tap  
Stevens County, Minnesota

Dear Ms. Fairchild:

Great River Energy (GRE) is in the process of preparing an environmental assessment for a new 115 kV substation and a 115 kV transmission tap line into the substation in Stevens County, Minnesota. The substation, which will be constructed and owned by Agralite Electric Cooperative (Agralite), is needed to meet growing electrical needs and improve system reliability in the area. GRE will construct and own approximately 125 feet of single circuit 115 kV transmission line to energize the proposed substation.

The proposed substation and tap line are located in Section 12, T123N, R40W near Hancock, Minnesota. A project fact sheet and a site map are enclosed for your information.

GRE is requesting information on the possible effects of the proposed project on any listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area. The proposed project does not represent a "major construction activity" as defined in 50 CFR 402.02.

We would appreciate receiving any written comments from your office by Friday, June 17, 2005. If you have any questions about this proposed project, please contact me at (763) 241-2272. If you wish to respond by e-mail, my address is [cschmidt@greenergy.com](mailto:cschmidt@greenergy.com). Thank you for your cooperation and assistance.

Sincerely,

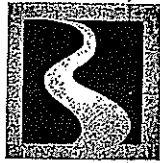
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Carole L. Schmidt  
Environmental Scientist

Enclosure

h:\cschmidt\Hancock\HanFWS





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18 May 2005

Ms. Britta L. Bloomberg  
Deputy State Historic Preservation Officer  
Minnesota Historical Society  
345 Kellogg Blvd. West  
St. Paul, MN 55102-1906

RE: Proposed Hancock 115 kV Substation and 115 kV Transmission Line Tap  
Stevens County, Minnesota

Dear Ms. Bloomberg:

Great River Energy (GRE) is in the process of preparing an environmental assessment (and an Environmental Report for RUS) for a new 115 kV substation and a 115 kV transmission tap line into the substation in Stevens County, Minnesota. The substation, which will be constructed and owned by Agralite Electric Cooperative, is needed to meet growing electrical needs and improve system reliability in the area. GRE will construct and own approximately 125 feet of single circuit 115 kV transmission line to energize the proposed substation.

The proposed substation and tap line are located in Section 12, T123N, R40W near Hancock, Minnesota. A project fact sheet and a site map are enclosed for your information.

GRE is requesting information on the possible effects of the proposed project on historic properties in the project area.

We would appreciate receiving any written comments from your office by Friday, June 17, 2005. If you have any questions about this proposed project, please contact me at (763) 241-2272. If you wish to respond by e-mail, my address is [cschmidt@greenergy.com](mailto:cschmidt@greenergy.com). Thank you for your cooperation and assistance.

Sincerely,

GREAT RIVER ENERGY

*Carole L. Schmidt*

Carole L. Schmidt  
Environmental Scientist

Enclosure

h:\cschmidt\Hancock\HanMHS



GREAT RIVER  
ENERGY®

17845 East Highway 10 • P.O. Box 800 • Elk River, Minnesota 55330-0800 • 763-441-3121 • Fax 763-241-2366

18 May 2005

Mr. Jim Groehler  
Office of Aeronautics  
Minnesota Department of Transportation  
222 E. Plato Blvd.  
St. Paul, MN 55107-1618

RE: Proposed Hancock 115 kV Substation and 115 kV Transmission Line Tap  
Stevens County, Minnesota

Dear Mr. Groehler:

Great River Energy (GRE) is in the process of preparing an environmental assessment for a new 115 kV substation and a 115 kV transmission tap line into the substation in Stevens County, Minnesota. The substation, which will be constructed and owned by Agralite Electric Cooperative, is needed to meet growing electrical needs and improve system reliability in the area. GRE will construct and own approximately 125 feet of single circuit 115 kV transmission line to energize the proposed substation.

The proposed substation and tap line are located in Section 12, T123N, R40W near Hancock, Minnesota. A project fact sheet and a site map are enclosed for your information.

GRE is requesting information on the possible effects of the proposed project on airports or airstrips in the project area.

We would appreciate receiving any written comments from your office by Friday, June 17, 2005. If you have any questions about this proposed project, please contact me at (763) 241-2272. If you wish to respond by e-mail, my address is [cschmidt@greenergy.com](mailto:cschmidt@greenergy.com). Thank you for your cooperation and assistance.

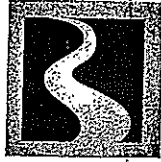
Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt  
Environmental Scientist

Enclosure

h:\cschmidt\Hancock\HanMnDO



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17845 East Highway 10 • P.O. Box 800 • Elk River, Minnesota 55330-0800 • 763-441-3121 • Fax 763-241-2366

18 May 2005

Mr. Jeffrey Hellermann, District Conservationist  
Natural Resources Conservation Service  
Morris Field Office  
12 Highway 28 E, Suite 1  
Morris, MN 56267

RE: Proposed Hancock 115 kV Substation and 115 kV Transmission Line Tap  
Stevens County, Minnesota

Dear Mr. Hellermann:

Great River Energy (GRE) is in the process of preparing an environmental assessment for a new 115 kV substation and a 115 kV transmission tap line into the substation in Stevens County, Minnesota. The substation, which will be constructed and owned by Agralite Electric Cooperative, is needed to meet growing electrical needs and improve system reliability in the area. GRE will construct and own approximately 125 feet of single circuit 115 kV transmission line to energize the proposed substation.

The proposed substation and tap line are located in Section 12, T123N, R40W near Hancock, Minnesota. A project fact sheet and a site map are enclosed for your information.

GRE is requesting information on the possible effects of the proposed project on important or prime farmlands in the project area.

We would appreciate receiving any written comments from your office by Friday, June 17, 2005. If you have any questions about this proposed project, please contact me at (763) 241-2272. If you wish to respond by e-mail, my address is [cschmidt@greenergy.com](mailto:cschmidt@greenergy.com). Thank you for your cooperation and assistance.

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt  
Environmental Scientist

Enclosure

h:\cschmidt\Hancock\HanNRCS

## **APPENDIX B**

LEGAL NOTICES.  
CORRESPONDENCE

# Hancock 115 kV Substation and Transmission Line Tap



**AGRALITE ELECTRIC COOPERATIVE**  
320 East Highway 12 Box 228  
Benson, MN 56215  
320-843-4150 or 1-800-950-8375  
[www.agralite.coop](http://www.agralite.coop)



**GREAT RIVER  
ENERGY**

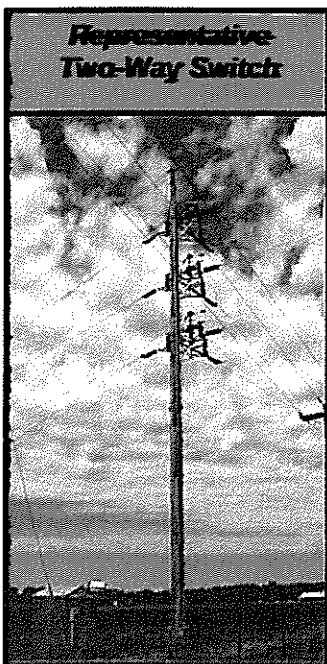
**GREAT RIVER ENERGY**  
17845 East Hwy 10 P.O. Box 800  
Elk River, MN 55330-0800  
1-800-442-3013  
[www.greatriverenergy.com](http://www.greatriverenergy.com)

## Project Need and Goal

Agralite Electric Cooperative's (Agralite) existing 41,600 volt (41.6 kV) Hancock Substation is inadequate from a reliability and voltage standpoint. This substation has seasonal voltage swings that are nearly outside the capability of the substation's voltage regulators. A local consumer will soon have a need for an additional 1.2 megawatts of power to operate an expanding operation. This new demand will exceed the capacity of the existing substation. Agralite is proposing to construct a new 115 kV substation next to Great River Energy's (GRE) 115 kV transmission line. The new substation will accommodate the demand and benefit the entire area's electric reliability and service.

## Substation

Agralite will own and build the new substation on the northeast corner of Minnesota State Highway 9 and 300th Street just south of Hancock in Stevens County, Minnesota. (see map on back) The new substation will be built next to GRE's existing 115 kV transmission line and contain a 115 kV transformer to lower the voltage to distribution levels. The new location is one mile east of the existing substation that will be retired upon completion of the new substation.



## Transmission Line Tap

Great River Energy, Agralite's power supplier will own and construct the 115 kV transmission line tap. The tap will consist of a two-way switch pole placed in-line with the existing transmission line (see photo). The switch pole will be 70-80 feet high with a single span to the substation.

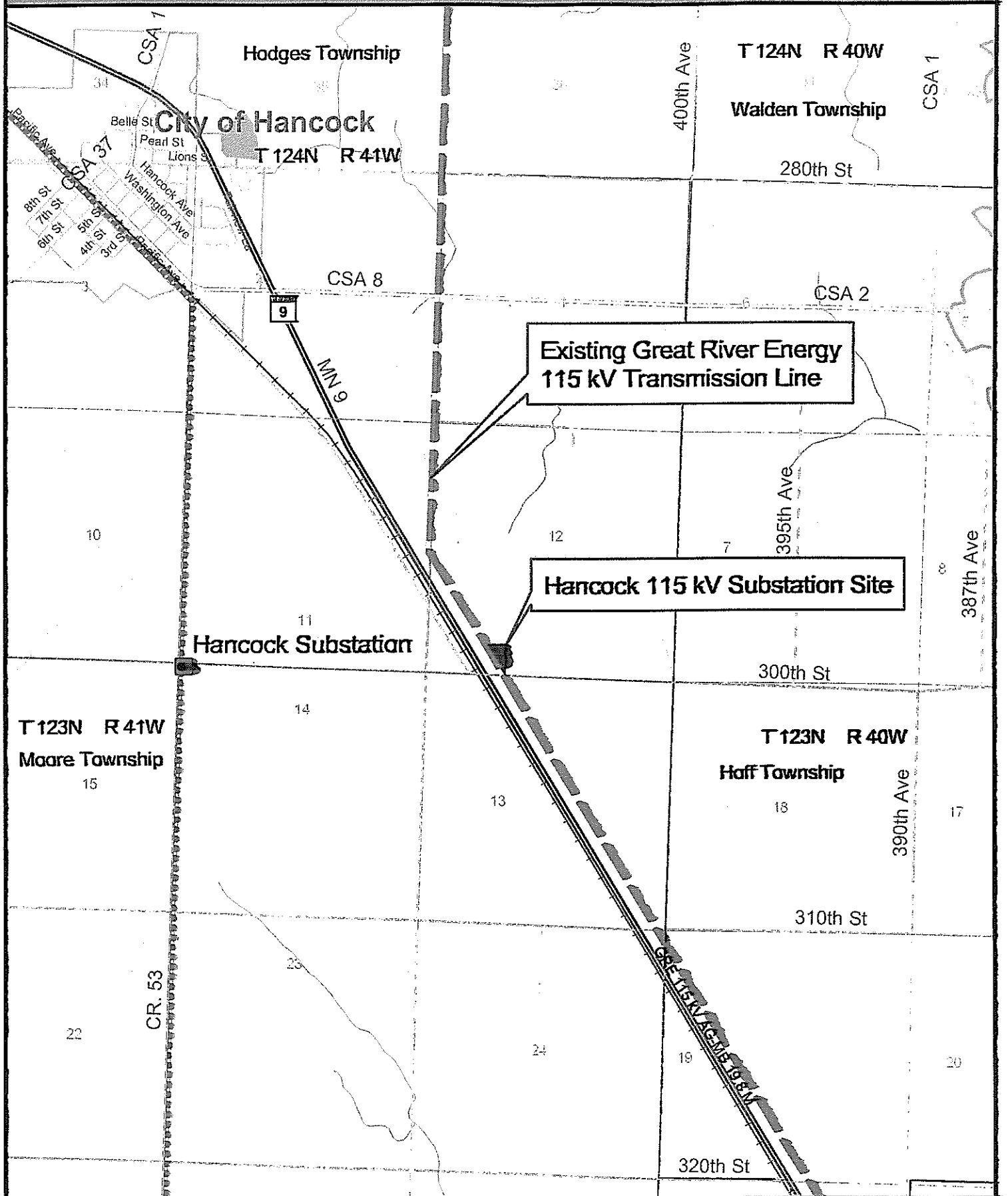
## Schedule

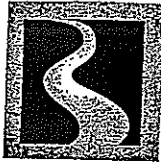
Land acquisition and construction will commence upon approval of a Stevens County conditional use permit and completion of an environmental assessment required for projects over 100 kV. The in-service date is scheduled for Spring 2006.

## Contacts

If you have any questions about this proposed project, please contact Tom Hoffman of Agralite Electric Cooperative at 1-800-950-8375 or Dale Aukee of Great River Energy at 1-800-442-3013, ext. 2229.

# PROJECT MAP





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May 23, 2005

WO #53811

Mr. Robert Schroeder, Chair  
MN Environmental Quality Board  
658 Cedar St., RM 300  
St. Paul, MN 55155

SUBJECT: Hancock 115 kV Substation

Dear Mr. Schroeder:

In accordance with the Power Plant Siting Act, this letter serves as the required notice to the Minnesota Environmental Quality Board (EQB) Chair that Agralite Electric Cooperative (AEC) has elected to seek local approval for the construction of a new 115 kV substation. Great River Energy (wholesale power supplier to AEC) will assist AEC and Stevens County with the permitting process. A Conditional Use Permit application was delivered to Stevens County on May 18, 2005. Stevens County has been informed that they have 60 days to refer the permitting process to the EQB.

The proposed substation would be located in Moore Township south of the City of Hancock in Stevens County. The new facility will meet the growing electrical demand and improve the service and reliability of electric facilities in the area. A fact sheet that provides more detail on the project is enclosed.

Questions regarding this project should be directed to James Thoreen, Stevens County Coordinator at 320-589-7417. I may be reached at 763-241-2229. Thank you for your attention to this matter.

Sincerely,  
GREAT RIVER ENERGY

Dale Aukee  
Field Representative

Enclosure

CC: EQB General List of Interested Persons – w/encl.  
Tom Hoffman, AEC – w/encl.  
James Thoreen, Stevens County – w/encl.

DA:jh\subs\Hancock\countypermitteqbllocalreviewltr.doc

Direct Dial (763) 241-2229

E-Mail [daukee@grenergy.com](mailto:daukee@grenergy.com)

FAX (763) 241-6003

[www.GreatRiverEnergy.com](http://www.GreatRiverEnergy.com)

# Hancock 115 kV Substation and Transmission Line Tap



**AGRALITE ELECTRIC COOPERATIVE**  
320 East Highway 12 Box 228  
Benson, MN 56215  
320-843-4150 or 1-800-950-8375  
[www.agralite.coop](http://www.agralite.coop)



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17845 East Hwy 10 P.O. Box 800  
Elk River, MN 55330-0800  
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## Project Need and Goal

Agralite Electric Cooperative's (Agralite) existing 41,600 volt (41.6 kV) Hancock Substation is inadequate from a reliability and voltage standpoint. This substation has seasonal voltage swings that are nearly outside the capability of the substation's voltage regulators. A local consumer will soon have a need for an additional 1.2 megawatts of power to operate an expanding operation. This new demand will exceed the capacity of the existing substation. Agralite is proposing to construct a new 115 kV substation next to Great River Energy's (GRE) 115 kV transmission line. The new substation will accommodate the demand and benefit the entire area's electric reliability and service.

## Substation

Agralite will own and build the new substation on the northeast corner of Minnesota State Highway 9 and 300th Street just south of Hancock in Stevens County, Minnesota. (see map on back) The new substation will be built next to GRE's existing 115 kV transmission line and contain a 115 kV transformer to lower the voltage to distribution levels. The new location is one mile east of the existing substation that will be retired upon completion of the new substation.

*Representative  
Two-Way Switch*



## Transmission Line Tap

Great River Energy, Agralite's power supplier will own and construct the 115 kV transmission line tap. The tap will consist of a two-way switch pole placed in-line with the existing transmission line (see photo). The switch pole will be 70-80 feet high with a single span to the substation.

## Schedule

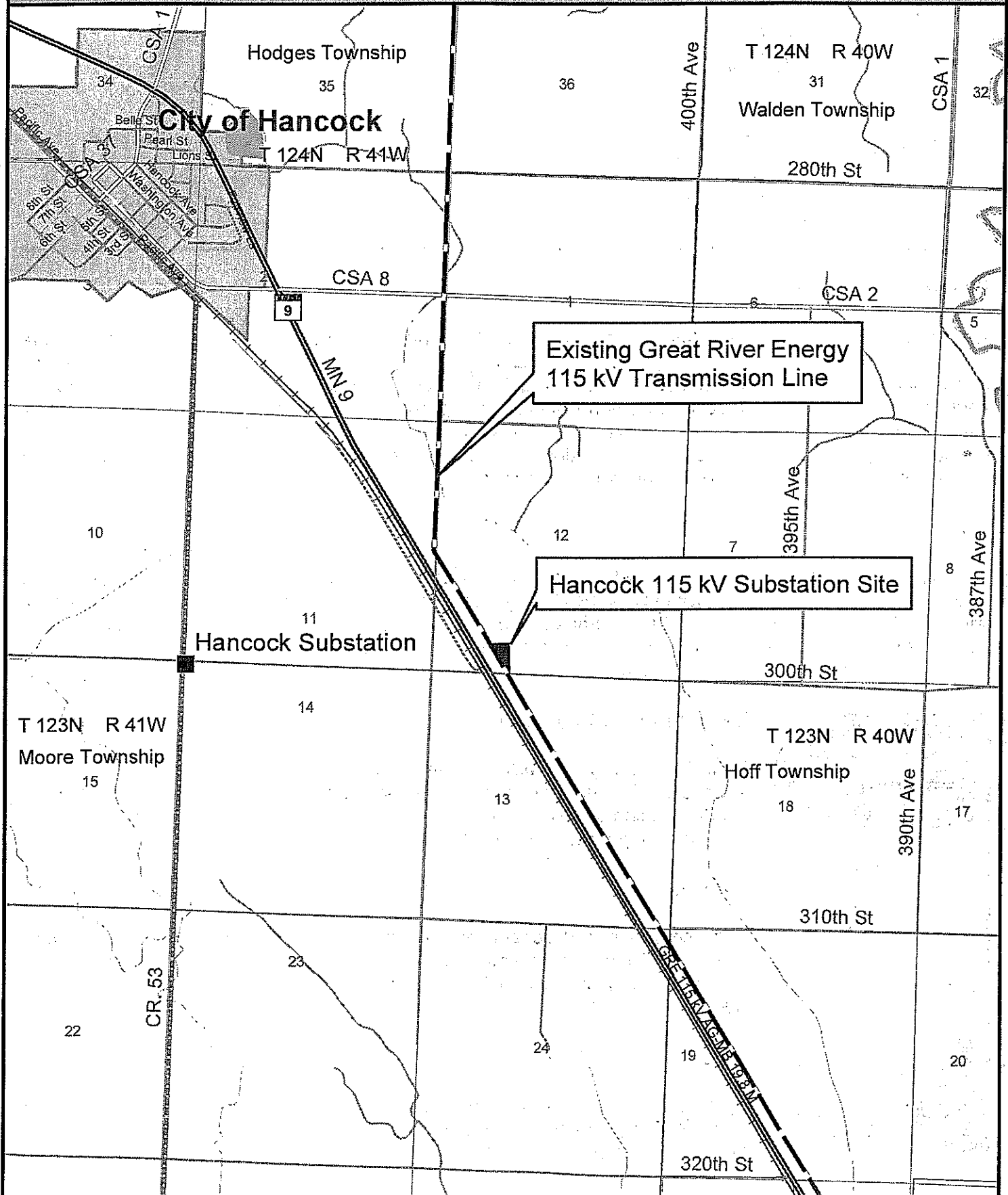
Land acquisition and construction will commence upon approval of a Stevens County conditional use permit and completion of an environmental assessment required for projects over 100 kV. The in-service date is scheduled for Spring 2006.

## Contacts

If you have any questions about this proposed project, please contact Tom Hoffman of Agralite Electric Cooperative at 1-800-950-8375 or Dale Aukee of Great River Energy at 1-800-442-3013, ext. 2229.



# PROJECT MAP



## **Public Comment Notice**

### **Subject: Environmental Assessment of the Agralite Electric Cooperative 115 kV Substation**

To meet increasing electrical demand and insure reliable electrical service, Agralite Electric Cooperative proposes to construct a new 115 kV electrical substation adjacent to Great River Energy's (Agralite's power provider) 115 kV transmission line in Moore Township, Stevens County, Minnesota.

As required by the State of Minnesota Power Plant Siting Act, an Environmental Assessment (EA) of the project must be completed. The Minnesota Environmental Quality Board has designated Stevens County as the local unit of government responsible for preparing the EA and permitting the project.

Stevens County invites the public to participate in the environmental process. The purpose of this notice is to solicit public comment and input on environmental issues associated with the project.

If you would like to comment or suggest a specific topic to be addressed in the final EA report, please submit them in writing to the Stevens County Coordinator by **July 22, 2005**. An outline of topics to be covered is available for review at the Stevens County Coordinator's Office, 400 Colorado Ave, Morris, MN 56267 or by calling 320-589-7417.

# **Hancock Environmental Assessment**

## **Topics Likely to Be Covered**

Description of Project  
Need for the Project  
Location and Ownership  
Substation Design  
Cost Estimate

### **Environmental Analysis**

Air Quality  
Water Resources  
Vegetation and Wildlife  
Soils and Geology

Human Settlement  
Archaeological and Historic Resources

Noise  
Aesthetics  
Public Health and Safety  
Transportation

### **Permitting Process/Public Involvement**

Minnesota Approval Process  
Public Involvement - EA  
Local Permitting  
Other Permits and Approvals

Figures – General Vicinity Map, Area Map, Substation Site Plan

Appendices – Letters from Government Agencies, Project Notification to the EQB  
Public Notices